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1449 PTO

U.S. Department of Commerce  
Patent and Trademark Office

Application No. : 10/607,090

Filing Date : June 25, 2003

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet 1 of 1

First Named Inventor: A. MUKOYAMA

Group Art Unit : 2821

Examiner Name :

Attorney Docket No. : NECU 20.463

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document	Kind Code if known <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear
MA		4,717,921		OHE, et al.	01/05/1988	
MA		4,679,052		OHE, et al.	07/07/1987	

**FOREIGN DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document Office <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Country	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YY/Y	Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear
MA		0 102 091 /	EP	SCHLUMBERGER LTD.	03/07/1984	
MA		9-36629 /	JP	SONY CORP	02/07/1997	
MA		0 747 989 /	EP	LK-PRODUCTS OY	12/11/1996	
MA		1 193 794 /	EP	HARADA INDUSTRY CO., LTD.	02/26/2003	
MA		2 385 992 /	GB	NEC CORPORATION	09/03/2003	

**Other Prior Art-Non Patent Literature Documents**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, country, where published, source.	Applicant check here if English language translation attached
MA		AW RUDGE, "THE HANDBOOK OF ANTENNA DESIGN" 1983: IEEE, pp. 842-844, VOL. 2, SECTION 17.6.2	

Examiner Signature	Date Considered
<i>[Signature]</i>	2/9/06

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1<sup>6</sup> if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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MA		2 334 382	UK	TELEFONAKTIEBOLAGET LM ERICSSON	08-18-1999	*
MA		0 755 091	EP	SONY CORPORATION	01-22-1997	*
MA		2 322 236	UK	DASSAULT ELECTRONIQUE	08-19-1998	*

\*Mentioned United Kingdom Office Action

## **Other Prior Art-Non Patent Literature Documents**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, country, where published, source.	Applicant check here if English language translation attached
MA		United Kingdom Office Action in patent application GB0314457.3 dated April 22, 2005	
Examiner Signature			Date Considered 2/6/06

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw a line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.1<sup>6</sup> if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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MA		6,772,953		Iiyama et al.	08-10-2004	
MA		2002/0017569		Iiyama et al.	02-14-2002	

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MA		2001-216491	JP	MATSUSHITA ELECTRIC IND CO LTD	08-10-2001	*, **

\*Mentioned in Chinese Office Action

\*\*Corresponds to US Applications 2002/0017569 and 6,772,953

**Other Prior Art-Non Patent Literature Documents**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-issue number(s), publisher, country, where published, source.	Applicant check here if English language translation attached
MA		Chinese Office Action in patent application 03148068.3 dated May 13, 2005	X
Examiner Signature	<i>Mark D. Smith</i>		Date Considered 2/6/05

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